

**U.S. Department of Education - EDCAPS
G5-Technical Review Form (New)**

Status: Submitted

Last Updated: 10/28/2020 08:20 PM

Technical Review Coversheet

Applicant: North American Native Research and Education Foundation INC (S411C200028)

Reader #1: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Quality of Project Design		
1. Quality of Project Design	40	37
Sub Total	40	37
Resources and Quality of Management Plan		
Resources and Quality of Management Plan		
1. Resources and Management	35	32
Sub Total	35	32
Selection Criteria		
Quality of the Project Evaluation		
1. Project Evaluation	25	22
Sub Total	25	22
Priority Questions		
CPP		
Competitive Preference Priority 1		
1. Computer Science	5	0
Sub Total	5	0
Total	105	91

Technical Review Form

Panel #1 - FY20 EIR Early Phase- AP2 STEM - 1: 84.411C

Reader #1: *****

Applicant: North American Native Research and Education Foundation INC (S411C200028)

Questions

Selection Criteria - Quality of Project Design

1. The Secretary considers the quality of the design of the proposed project based on the following factors:

Reader's Score: 37

Sub

1. (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

Strengths:

The goals, objectives, and outcomes around measuring student accountability and tracking students are clear, specific and measurable. The process of building on student participation and having students participate in each year of the project will support the success of the project. Pg e18-20

Weaknesses:

The project goal is around building and implementing a longitudinal program (modified from the Alaska Native American Science and Math program); however, there are no measures around the fidelity of the program or teachers who will be leading/building the program. The project does not include measures around the implementation of the curriculum and coursework being offered or around how teachers/instructors are being trained. Additionally, there is no mention of how the project will account for consistency or inconsistency of grading of the courses being offered across the 7 Native American Reservation school districts as they are measuring student growth for academics. Pg e18-20

Reader's Score: 7

2. (2) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs.

Strengths:

The project fully addresses the target population of high-need populations with a focus on Native student populations – a traditionally under-represented population within the STEM/science/math areas. Additionally, two other areas of identified needs include: 1) the need for connecting students with their home communities, and 2) showing that there is a very low percentage of Native students who go on to complete college and/or PhD programs, with many of those students entering college in need of remedial coursework in math and/or science. Pg e20-26

Sub

Weaknesses:

No weaknesses noted

Reader's Score: 10

3. **(3) The extent to which the design of the proposed project reflects up-to-date knowledge from research and effective practice.**

Strengths:

The project utilized up-to-date research and knowledge, specifically research around the needs and achievement of Native students within projects similar to the one proposed, including STEM curriculum practices. Additionally, the project focuses on both community and academics with strategies selected from up-to-date research studies with programs focused on Native American students. Pg e26-29; Reference appendix Pg e47-51

Weaknesses:

No weaknesses noted

Reader's Score: 10

4. **(4) The potential contribution of the proposed project to increased knowledge or understanding of educational problems, issues, or effective strategies.**

Strengths:

The project is poised to contribute to multiple aspects of knowledge around all three areas defined: educational problems (Native American students under-represented in STEM/math/science exposure and success), issues (lack of exposure for Native American and rural students to real-life STEM experiences), and effective strategies (infusing Indigenous content and value, integrating a mentor/coach to visit quarterly to build relationships and help students make connections with their home communities, and creating a community of learners across Montana reservations and within reservations). Pg e29-31

Weaknesses:

No weaknesses noted

Reader's Score: 10

Resources and Quality of Management Plan - Resources and Quality of Management Plan

1. **The Secretary considers the adequacy of resources and the quality of the management plan for the proposed project based on the following factors:**

Reader's Score: 32

Sub

1. **(1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.**

Sub

Strengths:

The project clearly lays out the management plan aligned with each goal and objective, including the measurements. The project will utilize the first six months of the project to recruit and develop the project, with actual students starting in June of 2021 – this allows for time for the project to hire key personnel and establish the project. The project has defined responsibilities and appears to be well distributed to ensure success and timeliness of each component of the grant. Pg e35-36

Weaknesses:

No weaknesses noted

Reader's Score: 10

2. (2) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

Strengths:

The project proposes a reasonable budget based on the large, rural nature of Montana, the travel involved outside of summer program, and key leaders who will oversee the project from both inside and outside of Montana (virtual meetings will be utilized). The project is heavy on personnel costs, but also provide stipends and travel for students, and provide for student needs while on the university setting. Minimal expenses have been put toward supplies and materials and a large percentage of key personnel are providing matching monies. Pg e32-33; Budget Narrative Pg e83-101

Weaknesses:

No weaknesses noted

Reader's Score: 5

3. (3) The qualifications, including relevant training and experience, of key project personnel.

Strengths:

The project has extensive experience for key leaders of the program including science/math/curriculum experience, implementing large state/federal/foundation grants, and research project experience. Additionally, the project will utilize experienced personnel from the foundation project (ANSEP) in the first two years of the project to ensure success as the program coordinator and summer staff are hired and lead years one and two. Pg e31-32; Appendix: Resumes Pg e56-63

Weaknesses:

No weaknesses noted

Reader's Score: 5

4. (4) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

Strengths:

The project utilizes informal and external data points and feedback collection methods. Utilizing an external advisory team from K-12, postsecondary administration, and statewide programs enhances the success of recruiting from different areas around the state. The project has planned for multiple times throughout the project where collected feedback, through measures such as surveys or classroom observations will be analyzed, and continuous

Sub

improvements can be made. Pg e36-37

Weaknesses:

One of the project's focus areas is connecting the student's communities and schools with the work that will happen at the university setting. There is no mention of including community members, Elders or family members of the students in any phase of the project, nor is there an avenue for the voice of any of these groups to be heard, or to receive feedback and have the opportunity to offer suggestions for change. In order to meet the objective of the grant to include the student's home community, it may be advantageous to consider finding the voice of these groups to ensure success of the project. Pg e36-37; throughout narrative

Reader's Score: 7

5. (5) **The extent to which the results of the proposed project are to be disseminated in ways that will enable others to use the information or strategies.**

Strengths:

The project has a thorough plan for dissemination of the results of the project. The team plans to submit the results for articles, conference presentations, and to utilize extensive contact lists through the Native American regional area to expand on the success of the project. Several of the leaders on the team have already published, so this will provide a point of reference as the project concludes and data and research are prepared. Pg e37-38

Weaknesses:

No weaknesses noted

Reader's Score: 5

Selection Criteria - Quality of the Project Evaluation

1. **The Secretary considers the quality of the evaluation to be conducted of the proposed project based on the following factors:**

Reader's Score: 22

Sub

1. (1) **The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice).**

Strengths:

To meet the What Works Clearing houses standards with reservations, the project proposes a research plan intended to provide evidence-based findings by replicating two recently conducted studies. The evaluation plan lays out different areas of contingencies, when necessary, on how data will be collected, how surveys will be developed, and how the project will utilize both summative and formative methods. The project will develop, test, and realign data collection and methods after the first year of the project to ensure consistency and reliability for the research component in years two-five. Pg e38-46

Sub

Weaknesses:

The project evaluation plan focuses on students and does not provide explanation on how it will account for the training or non-training of teachers on each of the Native reservations where the students will be taking math and science courses. Additionally, each district creates its own courses, so ensuring all students participating in the research project is given similar course content is important when comparing student success across different school districts where extreme differences may occur in teaching methods and curricular content. Pg e38-46

Reader's Score: 12

2. (2) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation.

Strengths:

The project clearly lays out research questions aligned with the goals and outcomes of the grant. Multiple measures are considered within data collection and both informal and formal evaluation methods are utilized. The evaluation is led by Kansas State University, which has provided evaluation services for over 360 federal grants, including 33 from the U.S. Department of Education. Pg e38-46; Implementation Checklist

Weaknesses:

No weaknesses noted

Reader's Score: 5

3. (3) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.

Strengths:

The evaluation plan and the logic model account for multiple layers within this project and have laid out an extensive data collection process, both informal and formal, throughout the project. It allows for a pilot year to create baseline data, to make adjustments in the program, and to provide continual feedback throughout. The achievement data utilized for student growth includes state assessments and ACT data, which can compare students across the state equally. Additionally, the inclusion of culturally responsive pedagogy as an influence on student academic achievement will add to a much needed bank of research. Pg e38-46

Weaknesses:

No weaknesses noted

Reader's Score: 5

Priority Questions

CPP - Competitive Preference Priority 1

1. Competitive Preference Priority 1: Computer Science

Projects designed to improve student achievement or other educational outcomes in computer science (as defined in this notice). These projects must address the following priority area: Expanding access to and participation in rigorous computer science coursework for traditionally underrepresented students such as racial or ethnic minorities, women, students in communities served by rural local educational agencies (as defined in this notice), children or students with disabilities (as defined in this notice), or low-income individuals (as defined under section 312(g) of the Higher Education Act of 1965, as amended).

Strengths:

CP 1 not addressed

Weaknesses:

CP 1 not addressed

Reader's Score: **0**

Status: Submitted

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Status: Submitted

Last Updated: 10/30/2020 10:11 PM

Technical Review Coversheet

Applicant: North American Native Research and Education Foundation INC (S411C200028)

Reader #2: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Quality of Project Design		
1. Quality of Project Design	40	38
Sub Total	40	38
Resources and Quality of Management Plan		
Resources and Quality of Management Plan		
1. Resources and Management	35	35
Sub Total	35	35
Selection Criteria		
Quality of the Project Evaluation		
1. Project Evaluation	25	21
Sub Total	25	21
Priority Questions		
CPP		
Competitive Preference Priority 1		
1. Computer Science	5	0
Sub Total	5	0
Total	105	94

Technical Review Form

Panel #1 - FY20 EIR Early Phase- AP2 STEM - 1: 84.411C

Reader #2: *****

Applicant: North American Native Research and Education Foundation INC (S411C200028)

Questions

Selection Criteria - Quality of Project Design

1. The Secretary considers the quality of the design of the proposed project based on the following factors:

Reader's Score: 38

Sub

1. (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

Strengths:

Goals, objectives, and outcomes are diverse enough to support the overall success and impact of the proposed project. They are clearly measurable and specific as outlined on the table on page e18-19. The applicant aims to develop a longitudinal program supporting American Indian students in middle and high schools with intensive summer modules and year-long follow up activities to increase math and science achievement on state exams and rigorous STEM coursework (p. e20).

Weaknesses:

None noted.

Reader's Score: 10

2. (2) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs.

Strengths:

The applicant describes significant achievement gaps for Native students and provides statistics around college access and graduation, which are extremely low among Native students, while remediation rates in math courses are well above their counterparts (p. e21). This positions the target population as a high-need group, with justified needs for STEM support in middle and high school. The five component approach to support the needs of target population with summer intensive and year-long ongoing activities are well positioned to support the outcomes of the proposed project. The first three components (AIMS Gatherings, Journeys, and Pathways) map out the summer modules for various grade levels and are based on a learning framework that includes STEM workshops, exploration lab, and field experience (p. e22). The remaining two components focus on academic year activities and research efforts for continuous support of target population and expansion of program to other Tribal communities (p. e25-26).

Sub

Weaknesses:

None noted.

Reader's Score: 10

3. (3) The extent to which the design of the proposed project reflects up-to-date knowledge from research and effective practice.

Strengths:

The proposed project is modeled after the Alaska Native Science and Engineering Program (ANSEP) and the applicant cites extensive research and findings of the impact of the ANSEP (p. e29). The ANSEP program similarly targets Native students with a strong, longitudinal academic support on STEM starting in 6th grade all the way through college and the program has turned into a national model of effective practices spanning over 20 years of impact in 95 Tribal communities (p. e28).

Weaknesses:

Part of the research dates back over 10-15 years ago, which is not all up-to-date. The applicant cites several studies that are not within the recent five to eight-year span. Examples include Cajete, Engle, Edwards, Lauer, Hartman, Seymour, Castagno, Ladson-Billings, and Lipka (p. e47-50).

Reader's Score: 8

4. (4) The potential contribution of the proposed project to increased knowledge or understanding of educational problems, issues, or effective strategies.

Strengths:

The applicant builds the proposed project on an existing similar research (ANSEP) and expands it further by adding two critical elements, infusion of Indigenous content and values and establishing a community of learners (p. e29). These elements add particular strength to the project as they are likely to better engage Native students in the programs offered and expand it to Tribal communities successfully. In this sense, the research has the potential to make significant contributions to the field and expand the knowledge base and effective practices beyond the ANSEP program.

Weaknesses:

None noted.

Reader's Score: 10

Resources and Quality of Management Plan - Resources and Quality of Management Plan

1. The Secretary considers the adequacy of resources and the quality of the management plan for the proposed project based on the following factors:

Reader's Score: 35

Sub

1. (1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.

Sub

Strengths:

The applicant provides great detail on project management in Table 4 p. e33-36), where key activities, deliverables, and milestones are listed aligning to each objective and outcome of the project. There are clearly stated start and end dates for each key activity, marked by key personnel responsible for it. The key activities range from hiring program coordinator, counselors and workshop leaders, to recruitment of students and developing summer programs, student meetings during the year, tutorial activities, and group celebrations (p. e34). The primary project management team is already identified and they are supported by local project leadership teams and an external advisory team (p. e33).

Weaknesses:

None noted.

Reader's Score: 10

2. (2) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

Strengths:

Program costs are justified due to serving a geographically large rural area where target population is spread across many Tribal communities(p. e32).

Weaknesses:

None noted.

Reader's Score: 5

3. (3) The qualifications, including relevant training and experience, of key project personnel.

Strengths:

The primary project team includes faculty members at the University of Idaho and the University of Montana, who are both well qualified to lead the proposed project, as they had similar experiences running middle school STEM programs in the past, having STEM backgrounds themselves and ties to Native communities and relevant research experience for the target population (p. e31). The project team will be receiving support from the founder of the ANSEP program, which adds particular strength in this area (p. e31).

Weaknesses:

None noted.

Reader's Score: 5

4. (4) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

Strengths:

The applicant lists several mechanisms for feedback and continuous improvement, including internal and external evaluations, as well as an advisory team (p. e36). As part of the internal evaluation, the project team provides monthly reports on progress, which are discussed during quarterly leadership meetings for mid-course corrections if needed (p. e36). The function of the external advisory team adds another strength for feedback and continuous improvement efforts. This team consists of K-12 and postsecondary leaders and members of other community based educational initiatives and they will particularly advise on Indigenous content development, rubrics, and

Sub

instruments (p. e37).

Weaknesses:

None noted.

Reader's Score: 10

5. (5) **The extent to which the results of the proposed project are to be disseminated in ways that will enable others to use the information or strategies.**

Strengths:

Dissemination plans include scholarly articles, conference presentations, and direct conversations with neighboring states where there is large concentration of Indigenous communities (p. e37). The key project personnel are well positioned to deliver on these dissemination efforts at local, state, and national landscapes due to their postsecondary administrative role and research expertise.

Weaknesses:

None noted.

Reader's Score: 5

Selection Criteria - Quality of the Project Evaluation

1. **The Secretary considers the quality of the evaluation to be conducted of the proposed project based on the following factors:**

Reader's Score: 21

Sub

1. (1) **The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice).**

Strengths:

There is evidence of survey instruments created or selected for evaluation methodology on both research focus areas, building a community and culturally responsive pedagogy (p. e39). Annual survey data along with student GPAs and state/national assessment data are collected and housed for longitudinal tracking (p. e41). Proposed Quasi-Experimental Design (QED) meets the Randomized Control Trial (RCT) requirement of the grant. The applicant's use of student achievement data from standardized assessments and propensity score matching is another strength to form a comparison group (p. e43).

Weaknesses:

The applicant does not mention how attrition will be addressed in the study. Furthermore, when forming a comparison group, the applicant states student GPAs may be considered as part of the propensity matching score calculations (p. e43), however the availability and accessibility of the GPA data on non-participants may be problematic and it is not addressed how this data will be acquired. This raises concerns with the quality of propensity score matching and the control group being truly a close representative of the target population.

Sub

Reader's Score: 12

2. (2) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation.

Strengths:

Project components (summer modules) and mediators (connectedness, culturally responsive pedagogy) are articulated in the evaluation design as potential influencers of project outcomes and will guide ongoing efforts for refinement and scalability (p. e44). Another strength to note is that the evaluation team will develop instruments and protocols to measure program implementation fidelity through site visits and video-based observations of program delivery (p. e42).

Weaknesses:

Acceptable threshold for implementation is not yet determined and it is stated to be discussed after the first year of implementation once the pilot program data is available (p. e43). This is a concern for fidelity measures not being set at the onset of the project launch. In addition, the impact evaluation is said to be conducted on summer modules but not on ongoing year-long activities (p. e42). The ongoing support activities during the school year such as meetings and tutoring sessions are presented as essential activities for community building and connectedness, but these are not explicitly addressed as part of the impact evaluation.

Reader's Score: 4

3. (3) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.

Strengths:

The signature summer modules programs (AIMS Gatherings, Journeys, and Pathways) are the focus of the impact study and the data collected on student assessments and GPAs add strength to the validity and reliability of performance data on intended outcomes (Table 5, p. e45).

Weaknesses:

None noted.

Reader's Score: 5

Priority Questions

CPP - Competitive Preference Priority 1

1. Competitive Preference Priority 1: Computer Science

Projects designed to improve student achievement or other educational outcomes in computer science (as defined in this notice). These projects must address the following priority area: Expanding access to and participation in rigorous computer science coursework for traditionally underrepresented students such as racial or ethnic minorities, women, students in communities served by rural local educational agencies (as defined in this notice), children or students with disabilities (as defined in this notice), or low-income individuals (as defined under section 312(g) of the Higher Education Act of 1965, as amended).

Strengths:

Not applicable. The applicant did not claim to focus on computer science.

Weaknesses:

Not applicable. The applicant did not claim to focus on computer science.

Reader's Score: **0**

Status: Submitted

Last Updated: 10/30/2020 10:11 PM

Status: Submitted

Last Updated: 10/28/2020 02:22 PM

Technical Review Coversheet

Applicant: North American Native Research and Education Foundation INC (S411C200028)

Reader #3: *****

	Points Possible	Points Scored
Questions		
Selection Criteria		
Quality of Project Design		
1. Quality of Project Design	40	38
Sub Total	40	38
Resources and Quality of Management Plan		
Resources and Quality of Management Plan		
1. Resources and Management	35	33
Sub Total	35	33
Selection Criteria		
Quality of the Project Evaluation		
1. Project Evaluation	25	22
Sub Total	25	22
Priority Questions		
CPP		
Competitive Preference Priority 1		
1. Computer Science	5	0
Sub Total	5	0
Total	105	93

Technical Review Form

Panel #1 - FY20 EIR Early Phase- AP2 STEM - 1: 84.411C

Reader #3: *****

Applicant: North American Native Research and Education Foundation INC (S411C200028)

Questions

Selection Criteria - Quality of Project Design

1. The Secretary considers the quality of the design of the proposed project based on the following factors:

Reader's Score: 38

Sub

1. (1) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

Strengths:

The applicant demonstrates five goals for the proposed project. These five goals are clearly defined and aligned with objectives and performance measurements. For example, goal three is to increase the competency of American Indian high school students in Math and Science. This goal is clearly aligned to the objective, 3.2, "75% of Montana American Indian Math Science (MT-AIMS) Pathways students will be proficient or above proficient in math and science". This objective will be measured by tracking student standardized test scores in math and science. (Pages e18-19)

Weaknesses:

None noted.

Reader's Score: 10

2. (2) The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs.

Strengths:

The applicant has identified several significant areas of needs of the target population. When compared with national averages, there are significant fewer Native American students competing a degree within four years. Only 17.7% of American Indian students were proficient in math in 2017 compared to 45% of white students in Montana's statewide Smarter Balanced Assessment. Only 57 American Indian students took at least one AP exam in 2016-2017. Only 12 of those tested scored a three or higher. Nearly 1,200 non-Native students passed an AP exam within that same time period. (Pages e21-22) In order to address these issues, the proposed project has three program components, AIMS Gatherings, AIMS Journeys, and AIMS Pathways. These are summer program efforts that will include STEM workshops, exploration labs, and field experiences. These experiences will occur on a university campus. In addition to these summer efforts, academic year activities will focus on strengthening relationships and assessing student progress. These components are clearly aligned with the identified needs and the objectives of the project. This will include tracking students who have completed of math and science classes

Sub

with grades of C or better. These efforts will ensure more opportunities for the target population to be successful at the college level. (Pages e21-e25)

Weaknesses:

None noted.

Reader's Score: 10

3. (3) The extent to which the design of the proposed project reflects up-to-date knowledge from research and effective practice.

Strengths:

The applicant demonstrates the use of incorporating the community and Native Ways of Knowing, Indigenous content into the learning environment based on the work of Alaska Native Science and Engineering Program (ANSEP) and the University of Alaska, Anchorage . The findings from that research relate directly to the goals and objectives of the proposed project. For example, to increase the percentage of eighth grade students completing Algebra with a grade of C or better by the end of 8th grade, the project design includes in Gatherings, Journeys, and Pathways activities that incorporate Native Ways of Knowing STEM content. (Pages e27-e29)

Weaknesses:

The applicant does not include how the component of visits by the program coordinator during the school year is based on specific up-to-date research or best practices. Without that information, it is difficult to determine if effective practices support this element.

Reader's Score: 8

4. (4) The potential contribution of the proposed project to increased knowledge or understanding of educational problems, issues, or effective strategies.

Strengths:

This project will produce results that can be utilized in similar, rural, isolated Native American settings. (Page e29) Goal five is an essential part of this project. That goal is to plan expansion of the program to other communities and grade levels. These efforts will provide for effective potential contributions based on the results of the project. (Page 19)

Weaknesses:

None noted.

Reader's Score: 10

Resources and Quality of Management Plan - Resources and Quality of Management Plan

1. The Secretary considers the adequacy of resources and the quality of the management plan for the proposed project based on the following factors:

Reader's Score: 33

Sub

1. (1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.

Strengths:

The management plan for the proposed project includes specific start and end dates that provide for effective timelines to ensure the completion of the project on time and within budget. (Pages e33-e36) The key activities or milestones are clearly outlined. For example, MT-AIMS Gatherings Program will begin in March, 2022. The management indicates who is responsible for the completion or supervision of the activities. For example, the surveys to be completed by students will be addressed by the Project Director, the Program Coordinator and the Evaluation Team.

Weaknesses:

None noted.

Reader's Score: 10

2. (2) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

Strengths:

The applicant clearly establishes reasonable costs for the personnel time applied to the project. For example, in year one, the academic support specialist will be assigned and paid at .5 FTE. Then during the subsequent years that position becomes full time. This aligns with the scope of the project. The budget narrative includes appropriate expenditures for the summer camps that included travel, room and board, and supplies and technology equipment. The contractual expenditures are appropriate and are aligned to the project activities. (Pages e84-e101)

Weaknesses:

None noted.

Reader's Score: 5

3. (3) The qualifications, including relevant training and experience, of key project personnel.

Strengths:

The applicant clearly establishes reasonable costs for the personnel time applied to the project. For example, in year one, the academic support specialist will be assigned and paid at .5 FTE. Then during the subsequent years that position becomes full time. This aligns with the scope of the project. The budget narrative includes appropriate expenditures for the summer camps that included travel, room and board, and supplies and technology equipment. The contractual expenditures are appropriate and are aligned to the project activities. (Pages e84-e101)

Weaknesses:

The applicant does not include specific training and experiences needed for the program coordinator, counselors, workshop leaders and instructors. Without specifics on these positions it is difficult to determine if the training and experience will be appropriate for the activities that they supervise.

Sub

Reader's Score: 3

4. (4) The adequacy of procedures for ensuring feedback and continuous improvement in the operation of the proposed project.

Strengths:

The procedures outlined by the applicant are adequate for the scope of the project. Those procedures include both formal external evaluation reporting as well as ongoing internal evaluation monthly reports. These reports will be reviewed by the Project Leadership Team quarterly and progress and changes needed, will be addressed. (Pages e36-e37) Stakeholders in the External Advisory Team, which include members from K-12 education, postsecondary administration and statewide programs, will provide feedback to the project team twice in years one and two and annually in the remaining three years. These elements of feedback will provide for appropriate and timely and will ensure continuous improvement.

Weaknesses:

None noted.

Reader's Score: 10

5. (5) The extent to which the results of the proposed project are to be disseminated in ways that will enable others to use the information or strategies.

Strengths:

The dissemination plan for this project includes written articles, conference presentations and direct conversations with neighboring states. The articles will be sent to publications at the national and regional level. The conferences will include national Native American conferences as well as local conferences. These efforts will provide adequate dissemination for the project. (Page e38)

Weaknesses:

None noted.

Reader's Score: 5

Selection Criteria - Quality of the Project Evaluation

1. The Secretary considers the quality of the evaluation to be conducted of the proposed project based on the following factors:

Reader's Score: 22

Sub

1. **(1) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project's effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in this notice).**

Strengths:

The evaluation plan includes a quasi-experimental design on the impact of the summer models on student outcomes during the five years of the grant. The evaluation plan includes both internal and external evaluators that use appropriate tools to determine both student achievement success and program success. For example, methods include participant outcome analysis, retrospective student interaction surveys, participant counts, GPA and test data as well as longitudinal tracking of course completions and participant interactions. T-test analyses of math and science competencies will be based on the state assessment data. These efforts will meet the What Works Clearinghouse standards with reservations. (Pages e42-e44)

Weaknesses:

None noted.

Reader's Score: 15

2. **(2) The extent to which the evaluation plan clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation.**

Strengths:

The evaluation project includes the research question: "To what extent is the project making progress towards stated goals, activities, outcomes and objectives?". To answer this question an implementation/progress checklist will follow the activities throughout the project. Those methods will include site visits, document review, focus groups, and a post-participation survey. These processes will provide appropriate evaluation to address the scope of the project. The project team will work with the external evaluator to determine an acceptable threshold for implementation of the project outcomes. (Page e44)

Weaknesses:

The applicant indicates a plan will be developed to determine an acceptable threshold for implementation; however, the evaluation plan does not include specific criteria that will be used for the plan. Without that information, it is difficult to determine what the extent the thresholds and if they will be measurable.

Reader's Score: 4

3. **(3) The extent to which the methods of evaluation will provide valid and reliable performance data on relevant outcomes.**

Strengths:

The performance measures that are included in the management plan will provide valid and reliable data. For example, the number of students participating in the MT-AIMS Gatherings, Journeys, and Pathways, will determine

Sub

the increase in number of students served. (Page e19)

Weaknesses:

The applicant does not include specific information that indicates how valid and reliable data will be collected and analyzed regarding the follow-up activities during the academic year.

Reader's Score: 3

Priority Questions

CPP - Competitive Preference Priority 1

1. Competitive Preference Priority 1: Computer Science

Projects designed to improve student achievement or other educational outcomes in computer science (as defined in this notice). These projects must address the following priority area: Expanding access to and participation in rigorous computer science coursework for traditionally underrepresented students such as racial or ethnic minorities, women, students in communities served by rural local educational agencies (as defined in this notice), children or students with disabilities (as defined in this notice), or low-income individuals (as defined under section 312(g) of the Higher Education Act of 1965, as amended).

Strengths:

None noted.

Weaknesses:

The applicant did not address Competitive Preference Priority 1.

Reader's Score: 0

Status: Submitted
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